Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims

- 1. (previously presented) A linear motor glide apparatus, comprising:
 - a unitary bearing rail structure providing with an array of magnets disposed on a surface thereof, the bearing rail structure exhibiting bearing rail surfaces for receiving bearings to roll against the surfaces;

bearing block assemblies comprising bearings position-able to roll against the bearing rail surfaces of the bearing rail structure; and

one or more connecting structures adapted to affix a linear motor coil assembly thereto and to which a plurality of the bearing block assemblies are mounted.

- 2. (original) The apparatus of claim 1, wherein one or more of the connecting structures conducts heat away from the linear motor coil assembly.
- 3. (original) The apparatus of claim 1, wherein one or more of the connecting structures exhibits, for a specified temperature range, a coefficient of thermal expansion that is substantially less than a coefficient of thermal expansion of a material which the linear motor coil assembly is comprised for the specified temperature range.
- 4. (original) The apparatus of claim 3, wherein the one or more connecting structures is mounted to a bearing block assembly by bolts inserted into bolt holes with a radial clearance sufficient to enable adjustment of a position of a bearing of the bearing block assembly relative to a bearing rail surface exhibited by the bearing rail structure.

- 5. (previously presented) The apparatus of claim 1, wherein the linear motor coil assembly comprises aluminum and a connecting structure exhibits, for a specified temperature range, a linear coefficient of thermal expansion that is substantially less than a linear coefficient of thermal expansion of aluminum for the specified temperature range.
- 6. (original) The apparatus of claim 5, wherein a connecting structure is mounted to a bearing block assembly by bolts inserted into bolt holes with a radial clearance sufficient to enable adjustment of a position of a bearing of the bearing block assembly relative to a bearing rail surface exhibited by the bearing rail structure.
- 7. (previously presented) The apparatus of claim 1, wherein a mechanism for mounting the linear motor coil assembly to a connecting structure enables the linear motor coil assembly to exhibit an amount of thermal expansion, for a specified temperature increase, that substantially exceeds an amount of thermal expansion exhibited by the connecting structure for the specified temperature increase.
- 8. (original) The apparatus of claim 1, wherein the bearing rail structure further comprises position indicator marks enabling detection by sensors of a position of the linear motor assembly.
- 9. (previously presented) A method of constructing a linear motor assembly, comprising the steps of:

providing a unitary bearing rail structure that exhibits a surface for upon which an array of magnets is disposed, the bearing rail structure exhibiting bearing rail surfaces for receiving bearings to roll against the surfaces;

providing bearing block assemblies comprising bearings position-able to roll against the bearing rail surfaces of the bearing rail structure; and

providing one or more connecting structures adapted to affix a linear motor coil assembly thereto and to which a plurality of the bearing block assemblies are mounted.

- 10. (original) The method of claim 9, wherein one or more of the connecting structures conducts heat away from the linear motor coil assembly.
- 11.(original) The method of claim 9, wherein one or more of the connecting structures exhibits, for a specified temperature range, a coefficient of thermal expansion that is substantially less than a coefficient of thermal expansion of a material which the linear motor coil assembly is comprised for the specified temperature range.
- 12. (original) The method of claim 11, wherein the one or more connecting structures is mounted to a bearing block assembly by bolts inserted into bolt holes with a radial clearance sufficient to enable adjustment of a position of a bearing of the bearing block assembly relative to a bearing rail surface exhibited by the bearing rail structure.
- 13. (previously presented) The method of claim 9, wherein the linear motor coil assembly comprises aluminum and a connecting structure exhibits, for a specified temperature range, a linear coefficient of thermal expansion that is substantially less than a linear coefficient of thermal expansion of aluminum for the specified temperature range.
- 14. (original) The method of claim 13, wherein a connecting structure is mounted to a bearing block assembly by bolts inserted into bolt holes with a radial clearance sufficient to enable adjustment of a position of a bearing of the bearing block assembly relative to a bearing rail surface exhibited by the bearing rail structure.

- 15. (original) The method of claim 9, wherein a mechanism for mounting the linear motor coil assembly to a connecting structure enables the linear motor to exhibit an amount of thermal expansion, for a specified temperature increase, that substantially exceeds an amount of thermal expansion exhibited by the connecting structure for the specified temperature increase.
- 16. (original) The method of claim 9, further comprising the step of providing an anticogging mechanism for reducing a cogging force exhibited by the linear motor.
- 17. (previously presented) The method of claim 9, further comprising an anti-cogging mechanism comprising a coil wrapped about a core, and wherein a current to reduce the cogging force is applied to the coil.
- 18. (currently amended) A method for reducing a cogging force exhibited by a linear motor, comprising the steps of:

providing a core element with windings wrapped around the core element positioned at an end of a core of the linear motor to move with the core; and

windings wrapped around the core element so that current induced in the windings provides an anti-cogging force.; and

positioning said core element to create a force acting in opposition to the cogging force.

- 19. (previously presented) The method of claim 18, <u>further comprising a current</u> source to apply current to the windings wherein a current to reduce the cogging force is applied to the windings of the core element.
- 20. (previously presented) The method of claim 18, comprising the steps of: providing a unitary bearing rail structure that exhibits a surface upon which an array of magnets is disposed, the bearing rail structure exhibiting bearing rail surfaces for receiving bearings to roll against the surfaces;

providing bearing block assemblies comprising bearings positioned to roll on the bearing rail surfaces of the bearing rail structure; and

providing one or more connecting structures adapted to affix a linear motor coil assembly thereto and to which a plurality of the bearing block assemblies are mounted.